## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1. (Previously presented) An optical device, comprising:

(a) an active semiconductor region configured to provide gain to signal light passing through said active region;

(b) a signal-light reflector arranged to reflect the signal light through the active region in a direction out of the plane of the active region;

(c) a pump-light reflector arranged to reflect pump light so as to form a pump standing wave in the device; and

an absorber configured to absorb light at a wavelength of the signal light and located at a position in the device at which there is no or substantially no pump light.

2. (Previously presented) An optical device as claimed in claim 1, in which the active region, the signal-light reflector, the pump-light reflector and the absorber are comprised in a monolithic unit.

3. (Previously presented) An optical device as claimed in claim 1, in which the absorber is arranged at or near a node in the pump standing wave.

4. (Previously presented) An optical device as claimed in claim 3, in which the active region comprises an element for interacting with light in the device.

5. (Original) An optical device as claimed in claim 4, in which the signal light forms a signal standing-wave by reflection from the signal-light reflector.

6. (Original) An optical device as claimed in claim 5, in which the absorber is arranged at or near an anti-node in the signal standing-wave.

7. (Previously presented) An optical device as claimed in claim 1, further comprising a second device for interacting with light, comprising a gain element that absorbs the pump light to provide gain to the signal light.

8. (Previously presented) An optical device as claimed in claim 7, in which the gain element is arranged at or near an anti-node in the signal standing wave.

9. (Previously presented) An optical device as claimed in claim 1, in which the signal-light reflector comprises a metal mirror or a semiconductor mirror or a dielectric stack.

10. (Previously presented) An optical device as claimed in any claim 1, in which the pump-light reflector comprises a metal mirror or a semiconductor mirror or a dielectric stack.

11. (Previously presented) An optical device as claimed in claim 1, further comprising a second pump-light reflector positioned for reflecting the pump light back towards the pump-light reflector.

12. (Original) An optical device as claimed in claim 11, in which the second pump-light reflector comprises a metal mirror or a dielectric stack.

13. (Previously presented) An optical device as claimed in claim 1, which has a monolithic or composite laser structure fabricated with a bottom Bragg reflector that reflects the pump and the signal, such that a pump field forms a standing wave.

14. (Previously presented) An optical device as claimed in claim 1, in which the pump-light reflector and the signal-light reflector are comprised in a single reflector.

15. (Previously presented) An optical device as claimed in claim 1, comprising a second signal-light reflector arranged for reflecting the signal light back towards the signal-light reflector.

16. (Original) An optical device as claimed in claim 15, in which the second signal-light reflector comprises a metal mirror stack.

17. (Previously presented) An optical device as claimed in claim 15, in which reflections from at least the signal-light reflector and the second signal-light reflector result in a cavity resonance or a sub-cavity resonance at a signal wavelength at which the active region provides gain, and the device further comprising a source of pump light at a pump wavelength, wherein the signal-light reflector reflects pump light at the pump wavelength.

18. (Previously presented) An optical device as claimed in claim 17, in which reflections from at least the signal-light reflector and the second signal-light reflector result in a cavity resonance or a sub-cavity resonance at the pump wavelength.

19. (Previously presented) An optical device as claimed in claim 1, the device being arranged to provide pulses of signal light.

20. (Cancelled)

21. (Cancelled)

22. (Previously presented) An optical device, comprising:

(a) an active semiconductor region configured to provide gain to signal light passing through said active region;

(b) a signal-light reflector arranged to reflect the signal light through the active region in a direction out of the plane of the active region; and

(c) a pump-light reflector arranged between the signal light reflector and the active region.

23. (Currently amended) A device as claimed in claim 22, further comprising an element for interacting with signal light in the device, the element being arranged between the [[pump light]] pump-light reflector and the [[signal light]] signal-light reflector.

24. (Previously presented) A device as claimed in claim 23, in which the element is a saturable absorber.

25. (Currently amended) An optical device comprising:

(a) an active semiconductor region configured to provide gain to signal light passing through said active region;

(b) a signal-light reflector arranged to reflect the signal light through the active region in a direction out of the plane of the active region;

(c) a pump-light reflector arranged to reflect pump light so as to form a pump standing wave in the device; and

(d) an element, arranged in the pump standing wave, effective to absorb pump light to provide gain to the signal light, the element being arranged at or near to an antinode of the pump standing wave.

26. (Previously presented) An optical device as claimed in claim 25, in which the element is arranged such that pump light is absorbed in the same region of the active region from which signal light is emitted.

27. (Previously presented) An optical device as claimed in claim 25, in which the element is a barrier region adjacent to a quantum well.